Mike Strickley

Unit Concept List

BSC 307

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| Concept | Objective(s) TSWBAT: |
| Interactions and interdependence of life | 1. Define Ecology and Biosphere |
| Levels of organization | 1. Define a species. 2. List the levels of organization in order of size. 3. Identify differences between each level of organization. |
| Ecological methods | 1. Discuss the methods used by ecologists to study living things and their environment. |
| Photosynthesis and Chemosynthesis | 1. Write out the equations for photosynthesis and chemosynthesis. 2. Discuss the process by which plants produce biomass and energy. 3. Identify the differences between photosynthesis and chemosynthesis. |
| Producers and consumers | 1. Define the roles of producers and consumers in an ecosystem. 2. Identify examples of producers and consumers. 3. Discuss the importance of detritivores and decomposers. |
| Feeding relationships | 1. Outline a food chain and food web. 2. Identify trophic levels within the food chain. |
| Ecological Pyramids | 1. Draw an energy pyramid, biomass pyramid and a pyramid of numbers. 2. Apply the principles that dictate the proportions of these pyramids. |
| Cycles of Matter | 1. Discuss the cyclical nature of the biosphere. 2. Outline the water, nutrient, carbon, nitrogen and phosphorous cycles. |
| Nutrient Limitation | 1. Explain nutrient limitation providing one example from nature. |